

Maine Fur Update

Spring 2020



Fur Harvest

- The new web-based fur registration system has resulted in getting better quality tagging results much faster.
- The 2019 bobcat harvest is the highest it's been since 2010 (57% were taken by hunting, 43% by trapping). The most bobcat taken by hunting were from Downeast and Central Maine, but trapped bobcats were more spread out across the southern half of the state.
- The coyote harvest trends have been fairly steady over time.
- The fisher harvest remains low, with lynx exclusion devices being a big factor.
- The marten harvest was the lowest it's ever been in 2019 - abundant natural foods like beechnuts last fall made it difficult to catch marten and other species.

Furbearer harvests for the 2019/20 trapping and hunting season, as compared to past trends in Maine¹.

Species	2019	3 yr Avg 2016-2018	10 yr Avg 2006-2015
Beaver	5,939	4,338	8,687
Bobcat	352	236	291
Coyote	1,874	1,468	1,728
Fisher	365	451	1,067
Red Fox	451	581	850
Gray Fox	247	197	301
Marten	315	859	2,174
Mink	333	435	1,765
Otter	635	458	705

¹ 2019-20 harvest data was updated to what animals had been registered by May 14, 2020. All imports and roadkills were excluded from this summary.

Biological Samples

Samples are collected from marten, fisher, otter and bobcat to closely monitor demographics of the harvest and ensure that trapping or hunting of these species is sustainable. These data are valuable when interpreting harvest trends and considering regulation changes.

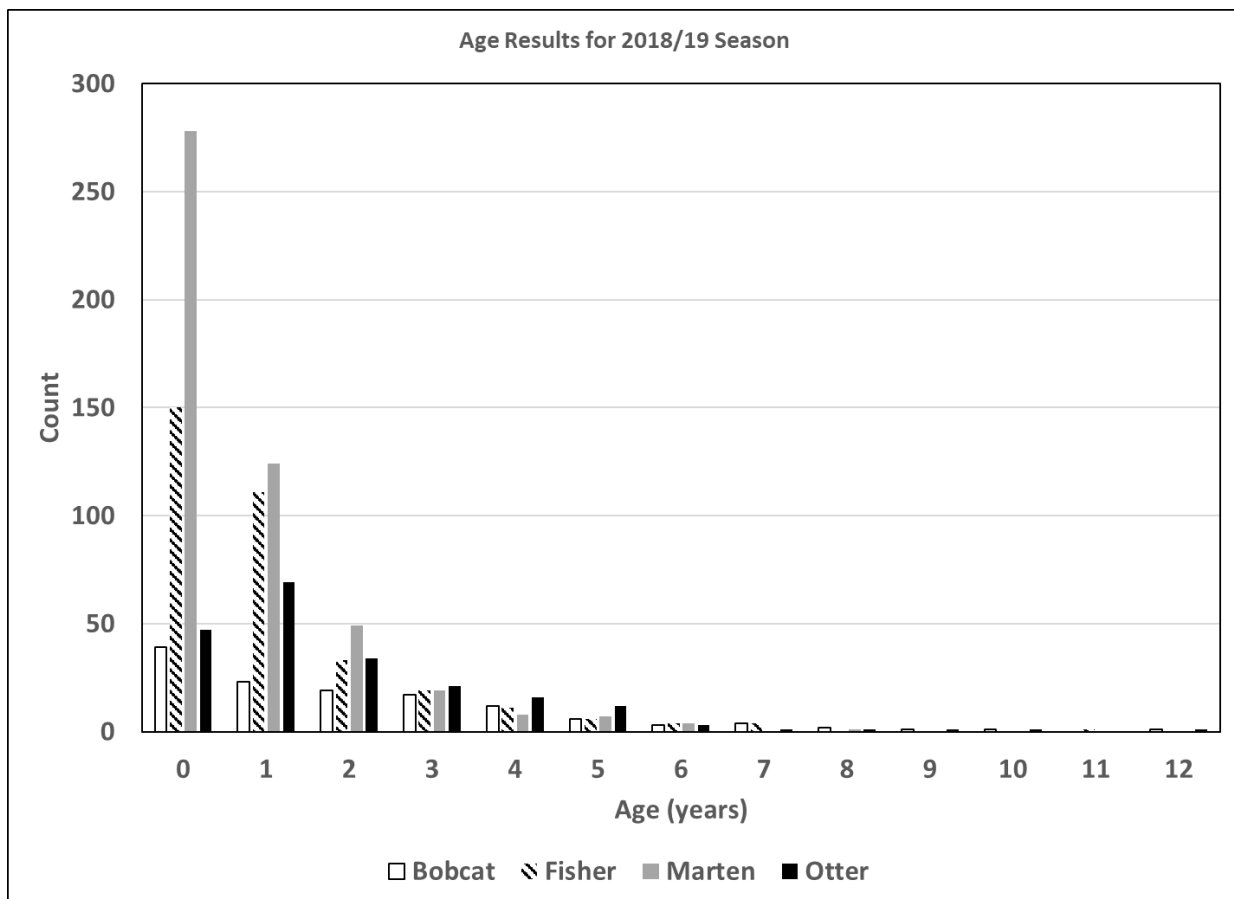
Tissue

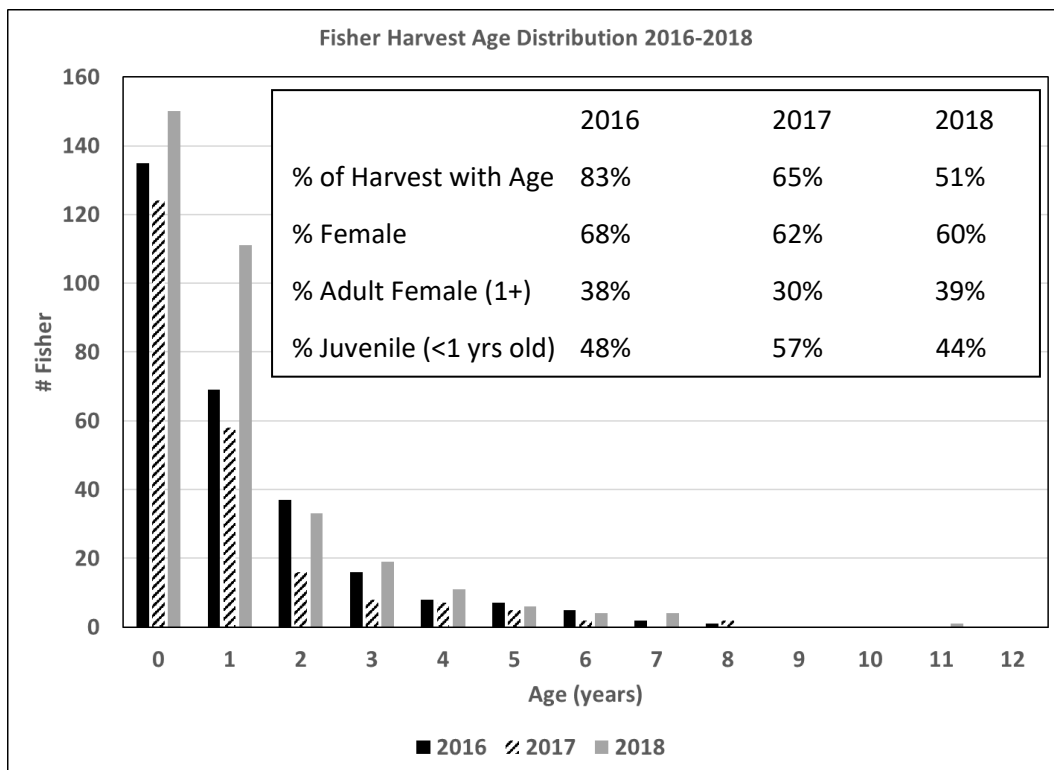
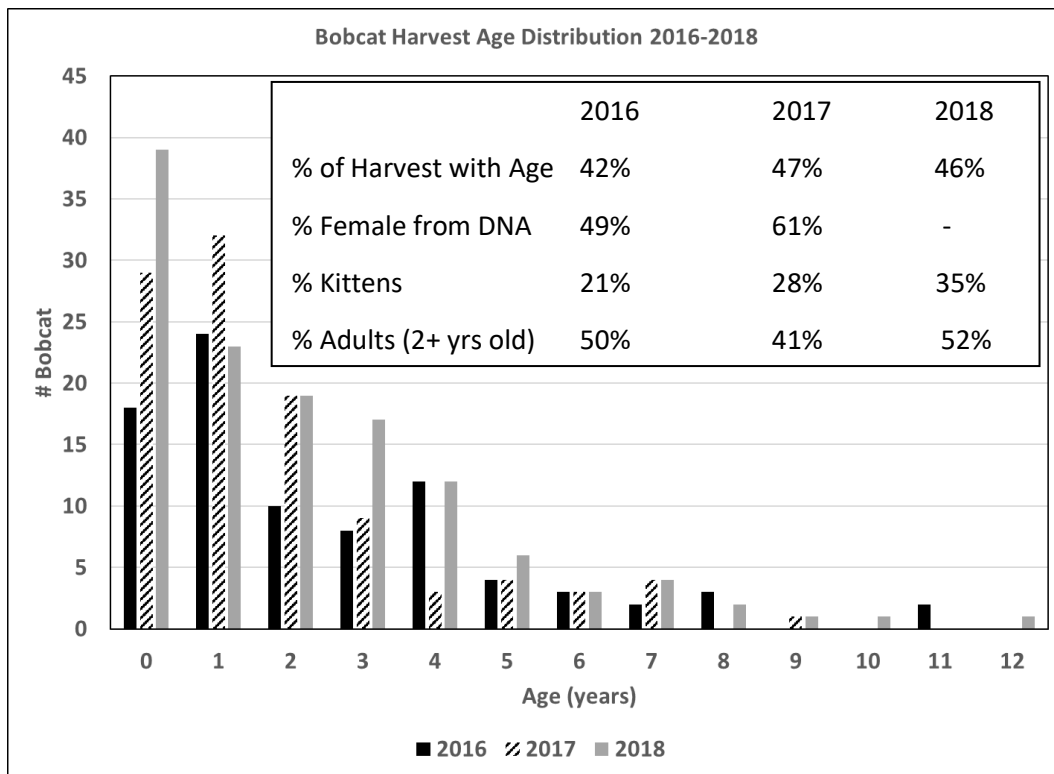
- Bobcat tissue samples are being used to determine gender from DNA and compare accuracy to the gender reported by hunters and trappers. Twenty-eight out of 54 (52%) bobcat samples

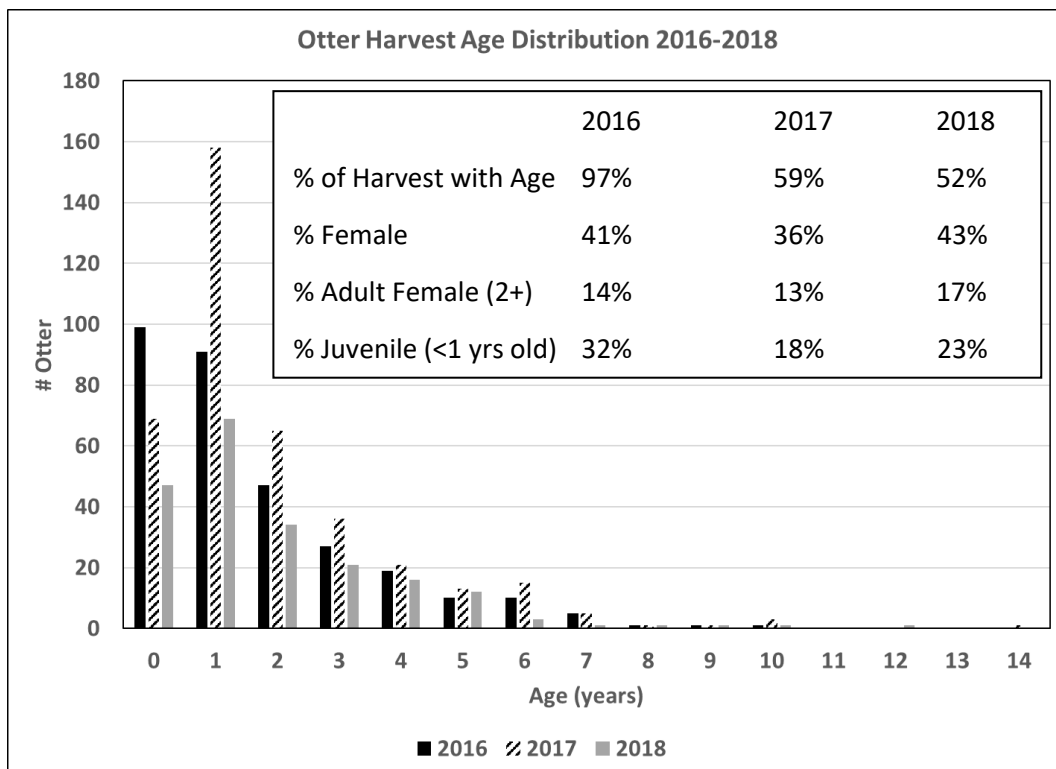
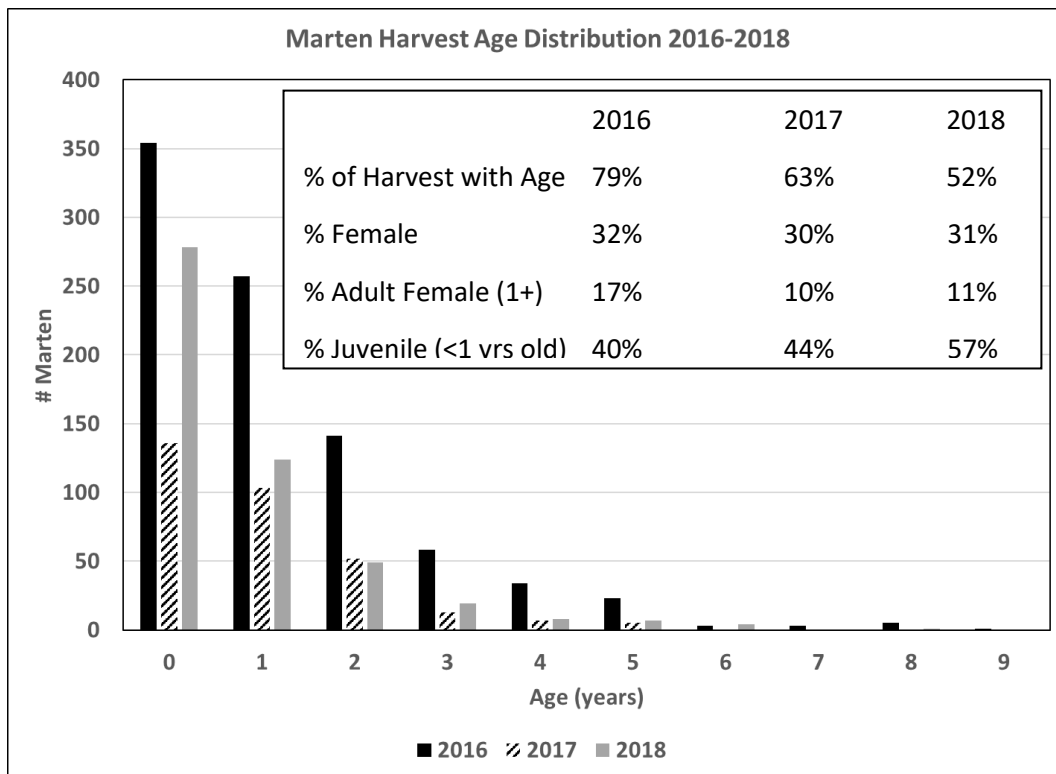
tested from 2016 and 2017 had accurate gender. The gender was more accurate by Trappers (62%), compared to Hunters (42%). We plan to continue collecting bobcat tissue samples to accurately determine gender.

Teeth

- Since 2016, the Department has collected tooth samples from marten, fisher, otter and bobcat to improve management of these species.
- Approximately 1,000-1,500 tooth samples get submitted each year.
- Species age and gender are somewhat variable between years, but harvest was comprised primarily of younger animals, particularly for fisher and marten (>73% fisher and >70% marten samples were less than 2 years old), and less pronounced for bobcat and otter (>40% bobcat and >39% otter samples were less than 2 years old).
- The oldest animals in the study are Bobcat (12 years old), Fisher (11 years old), Marten (9 years old), and Otter (14 years old).







Trapper Effort

- Trapper logs/ harvest reports have been around since 1990, but volunteer surveys have had low response rates (typically <5% of licensed trappers submitted harvest reports).
- Beginning in the fall of 2019, the Trapper Harvest Reports became mandatory to improve the management of all furbearer species.
- The Harvest Reports are the primary data source for species that are trapped but do not have to be tagged and provide important data on catch per unit effort to understand furbearer harvest trends. Similar to biological samples, trapper effort is used for evaluating regulation changes. For example, trappers have been telling the Department that fisher are hard to catch in lynx exclusion devices. We now have the data from harvest reports that show that ~35% of trappers that attempted to catch fisher in a given town caught no fisher in 2019 (same trends for 2018).
- For Fall 2019, ~50% of trappers reported that they did not trap for furbearers. Seven percent of trappers reported that they only got trapping license to trap for bear. Lack of time was the top reason for not trapping last fall from the online survey.

Preliminary Summary of Maine 2019 Fall Captures per 100 Trapnights

Beaver	Otter	Mink	Muskrat	Coyote	R. Fox	G. Fox	Bobcat	Skunk	Raccoon	Fisher	Marten
4.55	1.62	1.22	8.23	1.18	1.21	0.94	0.93	3.63	1.8	0.85	0.82

Muskrat Study

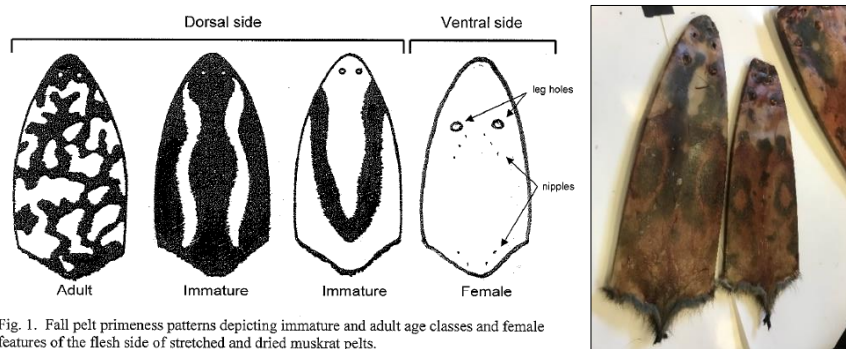


Fig. 1. Fall pelt primeness patterns depicting immature and adult age classes and female features of the flesh side of stretched and dried muskrat pelts.

- Although still common, muskrat populations have declined in Maine and across eastern North America in recent decades. Predation, water quality/fluctuations, and habitat loss have been suggested for contributing to these large-scale declines, but more research is needed.
- Since 2009, the Department has been recording the age and gender of muskrats at Maine Fur Auctions to better understand recruitment. Maine recruitment rates (6-10 Juveniles per Adult Female) appear to be similar to New York.
- Kidney Spots are light or dark areas in the pelt that can be under-prime. During the tanning process, guard hairs can fall out where kidney spots occur. These spots were not described historically and appear to be more prevalent. The causes of these spots are not well understood but may be related to warming waters.

Meso-Carnivore Camera Study

In 2017, the Department initiated research with [Bryn Evans](#) and [Alessio Mortelliti](#), at the University of Maine, to develop a [monitoring protocol](#) using game cameras to track population trends of marten and fisher in Maine. Camera stations are maintained during summer and winter, with each camera being set for 2-3 weeks. Sites are baited with chunks of beaver meat in a bird suet cage and skunk call lure made by a local trapper. The project started out by focusing on northern Maine in ~15 study areas stretching from Rangeley Lakes to Grand Lake Stream and north to Musquacook Lakes and Eagle Lake, including Baxter State Park. Study areas in western and central Maine were added in the latter part of the study to encompass a range in timber and fur harvest histories. The study will help assess the role that land management trends may have on both the presence and detectability of mustelids and other carnivores. The final field season is planned for summer 2020 and the research results will follow in winter 2020/spring 2021.



Rabies Update

Animals are tested for rabies when there has been potential exposure (typically a bite or direct contact) with humans or pets. Maine Department of Health and Human Services reported 89 animals tested positive for rabies in 2019, which was higher than the previous five-year average (average = 55, range = 28-76 animals from 2014-2018). Raccoon and skunk consistently represent the vast majority of the annual rabies cases. Some areas of mid-coast Maine have been particularly hard hit by rabies in recent years. In 2019, the City of Bath, with a population of over 8,000 people, received 72 suspicious animal calls, 26 sick animals were dispatched by officers or citizens, and 16 animals tested positive for rabies. Of the 18 fox attacks on people or pets, 11 attacks resulted in a person being bitten or scratched. The unusual number of aggressive grey fox attacks on people and domestic pets over a 14-month timespan raised human health and safety concerns and prompted a focused trapping effort to remove rabies vector species to reduce human-wildlife interactions.

USDA Wildlife Services continues the Oral Rabies Vaccine (ORV) Program in Maine that is primarily focused on the Maine/ New Brunswick border. The goal of the program is to prevent the further spread of wildlife rabies and eventually eliminate terrestrial rabies in the United States through an integrated program that involves the use of oral rabies vaccination targeting wild animals. Approximately 351,000 rabies vaccine baits were distributed by aerial delivery in northeastern Maine; in addition, vaccine baits were hand-distributed from vehicles in the town of Houlton during August 2019.

Learn more about annual rabies trends here: <https://www.maine.gov/dhhs/mecdc/public-health-systems/health-and-environmental-testing/rabies/rabies.htm>

Lynx Update

Maine's lynx population is doing well with lynx found throughout northern, western and eastern regions. Maine is home to the largest lynx population in the lower 48 states. In 2000, the US Fish and Wildlife Service (USFWS) listed lynx as a Threatened Species in Maine and 13 other northern states. Currently, resident breeding populations occur in Maine, Minnesota, Montana, Colorado and Washington. In 2018, the USFWS announced their recommendation to remove lynx from Federal protection because the threat (inadequate protection of lynx habitat on federal lands) had been met. However, the process to delist a species from Federal protection is long and includes several steps. One of the first steps, a species status review, has been completed. This review resulted in the recommendation to delist lynx. The next step in the process is to publish a proposed delisting rule on the Federal Register. Although the publication of the proposed rule has been delayed, it is expected later this year. Once published, the proposed rule will be open for public comment. A final decision is anticipated within 1 year of the proposed rule following the USFWS's review of public comments. In the meantime, the USFWS has been working with the affected states, including Maine, on the development of a post-delisting monitoring plan, which is a requirement of the US Endangered Species Act if a species is delisted.

Prior to listing, lynx were protected in Maine with the closure of hunting and trapping of lynx in 1967. Regardless of the USFWS final decision, the Department remains committed to providing trapping opportunities while also protecting lynx from incidental capture. This past fall, three lynx were incidentally caught by trappers in foot-hold traps; all were released unharmed. We appreciate the continued cooperation of trappers in Maine to protect lynx.

Learn more about avoiding lynx in traps here:

<https://www.maine.gov/ifw/docs/howtoavoidincidentaltakeoflynx.pdf>

<https://www.maine.gov/ifw/hunting-trapping/trapping-laws/avoid-lynx-videos.html>

Furbearer Planning

In 2019, MDIFW started the process to update furbearer management plans. During the fall, MDIFW worked with Responsive Management to obtain public input about furbearer management including attitudes towards trapping and human-wildlife conflicts. Maine residents, trappers, hunters, and landowners were surveyed across the state. Survey results indicated that 75% of the general population approve of regulated trapping, while 17% disapprove and 8% are neutral. Species subcommittees are meeting to develop management goals, objectives, and strategies within the following time period: Beaver/Otter (2019/20); Mink/Muskrat (2019/20); Canids (2020/21); Bobcat (2020/21); Marten/Fisher (2021/22); and Raccoon/Opossum/Weasel/Skunk (2021/22). Learn more about the Furbearer Management Plan and public survey results [here](#).

For more information, please contact Shevenell Webb, MDIFW Furbearer Biologist
Office: (207) 941-4473; Email: shevenell.webb@maine.gov